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July 29, 1993

VIA HAND DELIVERY

Ms. Donna R. Searcy, Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: Preparation for International Telecommunication Union World Radiocommunication Conferences
ET Docket No. 93-198

Dear Ms. Searcy:

Enclosed please find for filing on behalf of Motorola Inc. are an original and five copies of Reply Comments of Motorola Inc. in connection with the above-referenced matter.

Also enclosed please find one copy of the Reply Comments to be date stamped and returned with our messenger.

If there are any questions concerning this filing, please do not hesitate to contact me.

Respectfully submitted,

Alfred M. Mamlet

Alfred M. Mamlet
Counsel for Motorola Inc.

/srh-m

Enclosures

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List A B C D E

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of:	
Preparation for International Telecommunication Union World Radiocommunication Conferences.	**ET Docket No. 93-198**

REPLY COMMENTS OF MOTOROLA INC.

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SUMMARY

There is a general consensus that WRC-95 and WRC-97 should be devoted primarily to Mobile-Satellite Service ("MSS") issues in order to meet the growing demand for mobile satellite services. Motorola urges the Commission to promote the acceptance of flexible MSS agenda items for both conferences. In this way, as specific MSS issues require resolution, they can be considered without amending the agreed-upon agendas.

Given the critical need for more usable MSS spectrum in the 1-3 GHz bands, WRC-95 should address issues such as: (1) advancing the effective dates of certain MSS allocations; (2) converting all MSS spectrum to global allocations; (3) converting all service-specific MSS allocations to generic MSS allocations; and (4) adjusting certain bands allocated to MSS in view of potential limitations on sharing with other co-primary services.

While Motorola believes that MSS deserves the highest priority at the upcoming WRCs, it would be counter-productive to devote any time at these conferences to MSS issues that are not ready for decision. In this connection, WRC-93 should not consider any substantive issues, such as coordination of MSS systems in the 2 GHz bands. There is neither sufficient time nor justification for dealing with such issues at WRC-93. In

Finally, MSS feeder link issues should not be considered until the necessary ITU Radiocommunication Sector studies are completed (which is not expected to be until WRC-97) and domestic issues involving the 5/6 GHz bands are resolved.

Finally, most non-MSS issues are not ready for decision at WRC-95. For example, there will not be sufficient time for the Report of the Voluntary Group of Experts ("VGE") to be fully evaluated by the various administrations in advance of WRC-95, or to be treated with finality at the 1995 conference. Motorola suggests that the VGE Report be presented in full detail at WRC-95 and its recommendations be separately considered for adoption, if appropriate, at WRC-97 or, if warranted, at a special conference convened solely for this purpose.

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REPLY COMMENTS OF MOTOROLA INC.

the effective dates (such as those contained in International Footnote 746B) of certain MSS allocations;[3] (2) converting all MSS spectrum into global allocations;[4] (3) converting all service-specific MSS allocations to generic allocations;[5] and (4) adjusting bands allocated to MSS in view of potential limitations on sharing with other co-primary services.[6]

The U.S. can best further these important MSS interests by proposing at WRC-93, MSS agendas for WRC-95 and WRC-97 that [redacted]

on the MSS issues where decisions are required and can be fully supported in a timely fashion.

A. WRC-93 Should Not Consider Substantive Issues Such as Coordination Of MSS Systems In The 2 GHz Bands

The Commission should not promote Comsat Mobile Corporation's ("CMC") suggestion that WRC-93 consider the substantive issue of permitting interim coordination of MSS systems in the 1980-2010 and 2170-2200 MHz bands, pending a WRC-95 decision to advance the effective dates of MSS entry into the bands. CMC Comments at 9-10. WRC-93 was never intended to be a conference that would consider any substantive issues. Accordingly, the conference is only scheduled to last less than five full days. Rather, as the Commission has already recognized, "WRC-93 is expected to select substantive issues for the agendas for the 1995 and 1997 WRCs." Notice of Inquiry ("NOI"), at ¶ 1, FCC 93-328 (released June 28, 1993). See also CWS Comments at 2.

Given the short amount of time until WRC-93 begins and the limited time scheduled for the conference itself, it would be counter-productive to consider such a substantive and divisive substantive issue. At WRC-93, the U.S. should concentrate on building a consensus for giving favorable consideration to important MSS issues -- including advancement of the entry dates for the 2 GHz allocations -- at WRC-95 rather than trying to pre-judge such issues in a session intended to be devoted to the development of agendas.

CMC claims that its unusual request for consideration of a substantive issue -- namely, procedures for coordinating MSS satellite systems -- at a scheduling conference is necessary because Inmarsat "design decisions and launch vehicle orders need to be taken in 1994 or early 1995 to be available by the year 2000." CMC Comments at 5. CMC does not explain why Inmarsat must coordinate before making design decisions. In fact, there is no need for Inmarsat to coordinate its system prior to making design decisions and launch vehicle orders. Motorola and others have already made satellite design decisions, and identified launch vehicles even though their systems have not yet been coordinated.

Indeed, it appears that Inmarsat is already making decisions about the design of its satellite system, just as Motorola and others have, without coordinating first. For example, Inmarsat recently announced that they will not use a low-Earth orbit configuration for its Inmarsat P-system.[7/]

It appears that CMC's request is a result of the ITU Radiocommunication Bureau's recent issuance of an unfavorable finding on Appendix 3 (i.e., Resolution 46) information provided by the U.K. on behalf of Inmarsat for a satellite system that would operate in the 1970-2010 and 2160-2200 MHz bands.[8/]

[7/] See Inmarsat News Release (July 28, 1993) (Attachment 2).

[8/] The unfavorable finding, published on April 27, 1993, was based on the fact that the date specified by Inmarsat for bringing the system into use, January 1, 1998, is inconsistent with the date on which these bands will be available to the MSS under Footnote 746B, i.e., January 1, 2005.

[redacted]

which raised the question of whether downlink operations in the L-band would cause harmful interference with MSS uplinks. LQSS Comments at 4-5. However, LQSS fails even to mention the studies submitted by Motorola during the MSS Above 1 GHz Negotiated Rulemaking proceedings which refute the French paper,[10/] or Motorola's recent submission to the U.S. WP 8D.[11/] LQSS' attempt to have the secondary downlink allocation rescinded is nothing less than a request to ban the IRIDIUM™ system, since the primary paired MSS downlink band is not suitable for FDMA

system will be able to avoid causing harmful interference by various mitigation techniques, such as band segmentation and beam management.[12/]

C. MSS Feeder Link Issues Should Not Be Considered Until Necessary Studies Have Been Completed

Several commenters proposed substantive consideration of MSS feeder link issues at WRC-95.[13/] While Motorola agrees that MSS feeder link issues are important, consideration of these questions before WRC-97 would not allow sufficient opportunity for completion of needed studies showing the conditions for coordination of non-geostationary MSS feeder links with geostationary Fixed-Satellite Services in these bands.

None of the commenters promoting consideration of feeder link issues, however, represented that the necessary sharing studies are available or will be completed in time for thorough consideration at WRC-95.[14/] The most offered by any commenter on this point is CMC's statement that "[p]reliminary studies of the interference interactions of MSS feeder-links show that while sharing is technically feasible between non-GSO MSS feeder-links in the FSS bands and regular FSS operations in these

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[12/] See, e.g., Negotiated Rulemaking Report at Attachment 2 to Annex 1, §§ 4.0-4.5; IWG1-19; IWG1-21; IWG1-26; IWG1-35; IWG1-48; IWG1-63.

[13/] See, e.g., CCI Comments; CMC Comments; LQSS Comments; TRW Comments.

[14/] See, e.g., CCI Comments at 2; CMC Comments at 11; LQSS Comments at 6-7; TRW Comments at 7-9.

bands, some significant operational constraints are likely for the non-GSO MSS systems."[15/]

Full and complete studies addressing feasible solutions to these sharing concerns should be available before consideration at any future WRC. Addressing this issue at WRC-95 would be premature and would prevent full consideration of other important MSS issues that are ready for decision.[16/] Instead, the Commission should consider proposing these feeder link issues for the WRC-97 agenda.

WRC-95.[17/] Even if the VGE Report is completed as planned by 1994, there will not be sufficient time for the U.S. and possibly other administrations to develop positions on the VGE's recommendations before WRC-95.

Other commenters agree that full consideration of the VGE Report at WRC-95 is not realistic. For example, "CORF is concerned . . . that there may not be sufficient time for interested parties to adequately review and comment on the report

where CORF seeks a secondary allocation and footnote protection. CORF Comments at 6-7. Motorola has proposes and continues to plan on using the 19.4-19.6 GHz band for its IRIDIUM™ system feeder links in the space-to-Earth direction. The proposed allocation in the 19.1-19.6 GHz band should only be considered at a future conference if studies on sharing between the Earth Exploration-Satellite Service (passive) and MSS feeder links have been completed and are supportive of both operations.

C. Wind Profiler Radar Allocation Issues Should Be Addressed Only After Agreement Is Reached On A Candidate Band(s) And The Work Of Task Group 8/2 Is Reviewed

Although the American Radio Relay League ("ARRL") requests scheduling wind profiler radar issues for WRC-95,[19/] their comments effectively concede that this issue will not be ready for consideration at that time. It points out that: "It has proven difficult to reach agreement on candidate bands for profiler radars, considering the need for these devices to share spectrum with existing services."[20/] In light of these difficulties in formulating a U.S. position, ARRL expresses skepticism whether an international consensus "can be accomplished on time. . ."[21/] The wind profiler radar allocation issues should be addressed after there is a consensus

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19/ ARRL Comments at 7.

20/ ARRL Comments at 2.

21/ Id.

on a candidate band(s) and after the international community has had an opportunity to review the work of Task Group 8/2.

IV. ISSUES THAT SHOULD NOT BE ON THE AGENDA OF EITHER WRC-95 OR WRC-97

A. Broadcast Satellite Service (Sound)

There was unanimous agreement among the commenters, including the Broadcast Satellite Service (Sound) ("BSS") applicants, that BSS should not be on the agenda for WRC-95 or WRC-97.[22/] Therefore, the U.S. should oppose inclusion of BSS on the agendas for WRC-95 and WRC-97.

B. High Frequency Broadcasting Planning

Similarly, there is no critical reason for considering High Frequency ("HF") broadcasting issues at an upcoming WRC. None of the commenters explained why the existing Article 17 coordination procedures are insufficient. Indeed, one commenter noted that "a degree of order has been maintained in the bands allocated to the HF Broadcasting Service through the coordination procedure contained in Article 17 of the ITU Radio Regulations."[23/] Therefore, this issue should not be on either WRC agenda.

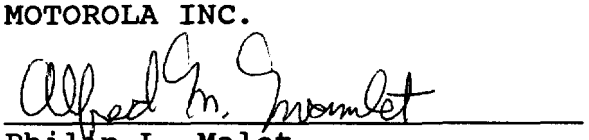
[22/] See Comments of Afrispace Corp; CD Radio, Inc.; Primoshphere Limited Partnership; Digital Satellite Broadcasting Corp.; AMSC.

[23/] See Comments of George Jacobs & Associates (filed on behalf of a number of broadcasters) at 4. The only complaint of these commenters and the National Association of Shortwave Broadcasters ("NASB") with the Article 17 coordination process is that the Commission has elected not to send staff members to regular HF frequency coordination conferences. Id.; NASB Comments at 3.

V. CONCLUSION

For the reasons discussed above, WRC-95 and WRC-97 should be devoted primarily to making the MSS allocations in the 1-3 GHz bands more usable. The U.S. should maintain flexibility by proposing a general MSS agenda item along the lines suggested in the draft resolutions provided in Attachment 1.

Respectfully submitted,
MOTOROLA INC.



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Dated: July 29, 1993

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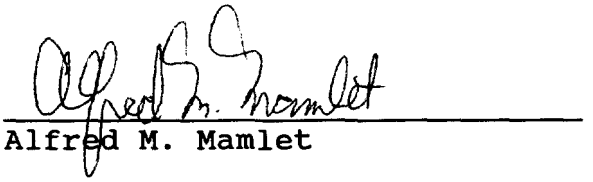

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